



Supporting nursing mothers to perform better at work: The role of flexible work environment in manufacturing firms in Ogun State

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Abstract

This study focused on a flexible work environment and task performance. The study used a survey research design. A survey was carried out on nursing mothers who work in 50 selected firms. A sample size of 200 nursing mothers working in these firms was obtained for this study. Ballpark sampling techniques were used in selecting the nursing mothers. Hypotheses were tested using the regression weight. Reliability of the instrument was achieved using Cronbach's alpha ($\alpha \geq 0.70$). The validity was tested using the AVE (values > 0.50). Discriminant validity was tested using the Fornell-Larcker criterion. Findings revealed that flexible work schedules have a positive and significant effect on the quality of work of nursing mothers, and that role fluidity has a positive and significant effect on the quality of work of nursing mothers. The study concluded that flexible work environments will significantly help nursing mothers to perform their work better and balance their work and family responsibilities. The study recommended that management should introduce flexible work schedules for nursing mothers to allow them to fulfill their family duties, and that managers should not give nursing mothers too many tasks and responsibilities, as it could hinder the quality of their work.

Keywords: Co-workers support, Efficiency, Flexible work schedules, Managerial support, Roles fluidity, Work quality.
JEL Classification: L69; J29; J81.

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Contribution of this paper

This study is the first to consider the support for nursing mothers and how they can perform better at work. It is unique because it employed a structural equation model for scientific analysis.

1. Introduction

Today, the issue around flexible work calls for attention in the workplace. Working mothers have to juggle their jobs with the care of their babies and other duties related to breastfeeding. Due to these demands of working mothers, they often experience stress and fatigue and encounter various challenges in adapting to their working environment following the birth of their children (Watson, Nelson, & Houston, 2026; Zhou et al., 2024). It is important to have a work environment that takes into account the challenges of nursing mothers. This is necessary to ensure that they can fulfill their work responsibilities. There is no doubt that the issue of a flexible work environment has been given attention in various organizations across the world. Such flexible work environments accommodate workers according to their needs by offering flexible work schedules, sharing work roles among employees, and providing support to both managers and co-workers of those employees. Studies have demonstrated that implementation of a flexible work environment can lead to improved performance of employees in their work, increased well-being of the employees, and an improved balance between the lives of those employees and their work (Çivilidağ & Durmaz, 2024; Ismail & Michael, 2023). For women, especially nursing mothers, implementation of a flexible work environment can also lead to increased satisfaction in their jobs and an improved quality of their lives (Jamunarani & Syed, 2025).

The idea of incorporating flexibility into the workplace is based on the need to balance the work and personal lives of employees. More specifically, flexibility in the workplace can include allowing employees to have flexible work schedules, fluid roles within the job, and ensuring that both managers and co-workers provide necessary support to the employees. For instance, studies show that allowing employees to have more flexibility in their work schedules can allow those employees to reduce stress and improve the quality of their work (Davidescu, Apostu, Paul, & Casuneanu, 2020; Ray & Pana-Cryan, 2021). Allowing employees to fluidly fulfill their roles within the company and to provide support to other employees who may be unable to perform their duties can also reduce stress and improve the performance of those employees (Major & Napier, 2019). Furthermore, providing support to managers and employees to ensure that those managers fulfill their roles can reduce stress and improve the performance of the employees (Lisbona, Bernabé, & Palací, 2020; Trifunović, 2024). Providing support to the employees' co-workers can also allow for a reduction of stress within the employees and improve their efficiency within the workplace (Sen & Yildirim, 2023; Sodeify & Habibpour, 2021).

Although there have been numerous studies published on flexible work environments and work arrangements for employees (Ismail & Michael, 2023; Jamunarani & Syed, 2025; Kosgei & Maende, 2024), many of these studies have focused on healthcare environments and countries in the world that have high rates of developed industries. Few studies have been performed regarding nursing mothers in manufacturing firms, especially in countries like Nigeria. In areas like Ogun State, Nigeria, manufacturing firms have some of the strictest work schedules and support systems for their employees. While there are a few studies that investigate flexible work environments and the performance of employees in hospitals and other sectors (Kosgei & Maende, 2024; Nnko, 2022), there are no studies regarding flexible work environments in manufacturing firms, especially in Ogun State. None of the studies published on flexible work environments in Nigeria has investigated aspects like flexible work schedules, fluid roles within the jobs, managerial support, and co-workers' support.

Based on the gap in knowledge regarding flexible work environments and nursing mothers in manufacturing firms in Ogun State, Nigeria, this study investigates the specific effects of flexible work environments on nursing mothers in manufacturing firms. More specifically, this study investigates how flexible work schedules affect the quality of work of nursing mothers, how fluidity in job roles affects the quality of work of nursing mothers, how managerial support to nursing mothers impacts the efficiency of the nursing mothers, and how support from co-workers of nursing mothers impacts the efficiency of those nursing mothers. This study is significant, as it will help to gain an understanding and design a policy on how flexible work environments can support nursing mothers and allow them to better perform in their workplaces.

2. Literature Review and Hypothesis Development

2.1. Work Schedule Flexibility, Role Fluidity, and Quality of Work

Work flexibility should be implemented within organizations today. Research has shown that work flexibility can drive improved performance at work (Davidescu et al., 2020; Ismail & Michael, 2023). It ensures that workers face less pressure, and this leads to better health for him/her. He/she ends up producing good-quality work (Ray & Pana-Cryan, 2021; Wöhrmann, Dilchert, & Michel, 2021). Nursing mothers need flexible work. This is because they have to balance work and family responsibilities.

Research shows that flexibility in work schedules results in better quality of work among nurses. Using flexible work schedules for nurses reduces the fatigue and difficulties that nurses experience while on the job (Li et al., 2023). Flexible work schedules also aid nurses in reducing the feeling of burnout and improving their performance in the office (Albadarin, 2025). However, when work schedules are not flexible, employees experience stress and a poor quality of their work. Nursing mothers in particular have difficulties coping with the rigid schedules that are in place in most workplaces, especially after returning from childbirth (Watson et al., 2026; Zhou et al., 2024). Flexible work schedules can significantly reduce these problems in the workplace (Choi, 2020; Hokke et al., 2024).

Role fluidity determines the quality of work performed by employees. Role fluidity allows employees to change roles in the office and share tasks. This facilitates workers assisting each other and completing the tasks assigned to them. Studies by Major and Napier (2019) revealed that role fluidity increases the quality of the work that is performed as workers can manage their various roles at work and at home. Role fluidity reduces the pressure that workers experience at work and improves their quality of life. Studies also show that role fluidity results in a better work-life balance (Ismail & Michael, 2023). For nursing mothers, it is important to investigate how role fluidity can affect the quality of their work. This is because role fluidity will allow them to adjust to the changes in their roles

after maternity leave and perform their duties at home and at work. This leads to the formulation of the hypothesis that:

H₁: Work schedule flexibility affects quality of work.

H₂: Role fluidity affects the quality of work.

2.2. Managerial Support, Co-Worker Support, and Efficiency

Managerial support involves understanding the needs of the employees and providing support to them when necessary. Studies have shown that when managers provide support to the workers, their efficiency and performance at work increase (Trifunović, 2024). A similar report has been made regarding the importance of managerial support in creating a good performance system in the workplace (Ndlovu, Van Wyk, & Leech, 2024). Managerial support should not be underestimated in this case, given the type of activities that demand special requirements. It is important to allow nursing mothers to breastfeed their children and make them pleased and concentrate on their jobs. Research indicates that when employees are given an opportunity to feel comfortable with their work and their special needs are attended to by the management, it makes it easier for them to commit themselves to their work (Lisbona et al., 2020). Nursing mothers who are given such an opportunity suffer less work pressure and stress. As research shows, nursing mothers who receive support from the workplace to breastfeed their babies are in a position to effectively balance their work and parenting roles and become active at their jobs (Daniels, Mbhenyane, & Du Plessis, 2024; Türkmen, Oran, Gürol, Gök, & Aydın İnce, 2025). Those who do not receive such support at work end up suffering stress and are unable to perform effectively at their places of work (Alao et al., 2025; McCardel & Padilla, 2020).

Co-workers providing support to each other ensure that the workplace remains friendly and comfortable for all employees and that no employee experiences stress from their work. Studies show that when employees receive support from their co-workers, they are more efficient and satisfied with their jobs (Sen & Yildirim, 2023). Studies also show that having support from other co-workers allows the workers to have a better balance between their work and their family life. For example, nurses who have support from other nurses in their care team experience less stress in caring for their patients and have a better work-life balance (Jeong & Lee, 2020). Studies have also shown that having support from other workers in the same job reduces the work-family conflict that the worker experiences (Siddiqi, Hashim, Mahmood, & Rahman, 2025). Additionally, studies show that when workers are allowed to have support from their co-workers, their job stress and role conflict decrease, allowing them to be more efficient in their jobs as women who are also managing their work and family life (Duong, Hussain, & Subramaniam, 2020). Work settings require the workers to work as a team. If the co-workers support each other, the work will be done faster and with better results. Research has shown that both the support from the supervisors as well as the co-workers will improve the performance and efficiency of the employees in the organization (Macias-Velasquez et al., 2021). Co-worker support allows nursing mothers to adjust to their work after giving birth and to be able to fulfill their work duties effectively (Sodeify & Habibpour, 2021). Hence, the hypotheses that:

H₃: Managerial support has a positive effect on efficiency.

H₄: Co-worker support has a positive effect on efficiency.

3. Methodology

3.1. Research Design

The study used a survey research design to collect data on the flexible work environment and task performance of nursing mothers working in manufacturing firms in Ogun State. A survey was carried out on nursing mothers who work in 50 selected firms. The researchers reached the nursing mothers by talking to them directly, making phone calls, and asking permission from the firms. The data were collected at a time when it was most convenient for the nursing mothers to ensure that they were not disturbing their normal work.

3.2. Sampling

The population for this study was the nursing mothers who work in manufacturing firms in Ogun State. These manufacturing firms were selected as they employ a good number of nursing mothers who are required to balance their work and family roles. In this regard, they qualify to become the respondents of this research. The researchers employed the method of purposive sampling to select only the nursing mothers. The selection of nursing mothers helps the researchers to concentrate on data relating to working in a flexible environment and performing tasks. A purposive sample size of 200 nursing mothers working in these firms was obtained for this study. Ballpark sampling techniques were also used in selecting the nursing mothers who would participate in the study.

3.3. Data Collection Instrument

A questionnaire was used to collect data on the flexible work environment and task performance of nursing mothers. The areas of focus for the questionnaire included aspects of flexible work environment, such as work schedule flexibility, role fluidity, managerial support, and co-worker support, and aspects of task performance, such as quality of work and efficiency. These aspects were included based on ideas from previous studies on the topic of flexible work (Davidescu et al., 2020; Ismail & Michael, 2023; Sen & Yildirim, 2023). The questionnaire used a five-point Likert scale that asked the nursing mothers to rate the extent of the flexible work environment aspects that they experienced on a scale from 1 to 5, with 1 being strongly disagree and 5 being strongly agree. The validity of the instrument was examined through construct validity testing. Reliability was tested using the Cronbach Alpha test, and the values obtained were all above 0.70 (see Table 1).

3.4. Data Analysis

Data were analyzed using descriptive and inferential statistics. More specifically, regression analysis was used to test the hypotheses that were formulated at a significance level of 5% (0.05). This method of analysis was used to determine the relationship between the flexible work environment of nursing mothers in manufacturing firms and their task performance (Davidescu et al., 2020; Ismail & Michael, 2023). The reliability of the variables in the study

was measured using Cronbach's alpha with a required value of $\alpha \geq 0.70$. The validity was tested using AVE values that were required to be greater than 0.50, in addition to factor loadings that were required to be at least 0.70. Furthermore, discriminant validity was tested using the Fornell–Larcker criterion. The following models are specified for the regression.

$$QOW = \beta_0 + \beta_1WSF + \beta_2ROF + \varepsilon \tag{1}$$

$$EFF = \beta_0 + \beta_1MAS + \beta_2CWS + \varepsilon \tag{2}$$

Where;
Work Schedule Flexibility = WSF.
Role Fluidity = ROF.
Managerial Support = MAS.
Co-worker Support = CWS.
Quality of Work = QOW.
Efficiency = EFF.
 β = Coefficient.
 ε = Error Term.

Table 1. Validity and reliability.

Construct	AVE	CR	Cron. (α)
Work Schedule Flexibility (WSF)	0.685	0.828	0.814
Role Fluidity (ROF)	0.628	0.793	0.780
Managerial Support (MAS)	0.705	0.840	0.796
Co-worker Support (CWS)	0.649	0.806	0.802
Quality of Work (QOW)	0.621	0.788	0.782
Efficiency (EFF)	0.646	0.804	0.810

4. Data Analysis and Results

As shown in Table 1, all constructs employed in the study were found to be valid and reliable as per the requirements. All constructs had acceptable AVE values greater than 0.50, implying acceptable levels of convergent validity. This implies that the items employed for measurement were effectively able to explain each construct. The AVE values are work schedule flexibility (0.685), role fluidity (0.628), managerial support (0.705), co-worker support (0.649), quality of work (0.621), and efficiency (0.646). The table shows that all constructs have high CR values (CR > 0.70). This indicates good levels of consistency between measurement items. The Cronbach’s alpha values for all constructs also exceeded the minimum acceptable value of 0.70.

Table 2. Discriminant validity.

Variables	WSF	ROF	MAS	CWS	QOW	EFF
WSF	0.828					
ROF	0.245	0.793				
MAS	0.115	0.018	0.840			
CWS	0.076	0.108	0.046	0.806		
QOW	0.214	0.176	0.105	0.125	0.788	
EFF	0.231	0.009	0.113	0.200	0.184	0.804

The results regarding the discriminant validity of the constructs employed in the study are provided in Table 2 using the Fornell-Larcker criterion. The values along the diagonals, presented in bold, correspond to the square roots of the AVE for each of the constructs, whereas the other values are the correlations between the constructs. It can be seen from the table below that the square root of the AVE of each of the constructs is higher than their correlations. For instance, for work schedule flexibility, the value was 0.828, higher than its correlation with such constructs as role fluidity (0.245), managerial support (0.115), coworker support (0.076), quality of work (0.214), and efficiency (0.231). The same patterns have been demonstrated by all the constructs included in the research. One may assume that each of the constructs employed in this research is distinct and measures a unique phenomenon.

Table 3. Demographics of respondents (N= 200).

Demography	Frequency	Percent
Age		
Below 25	38	19.0
25–34	65	32.5
35–44	66	33.0
45 and above	31	15.5
Marital Status		
Single	56	28.0
Married	64	32.0
Divorced	37	18.5
Widowed	43	21.5
Level of Education		
Secondary	17	8.5
NCE/ ND	72	36.0
First Degree	59	29.5
Postgraduate	52	26.0
Number of Children		
1	66	33.0
2	70	35.0

Demography	Frequency	Percent
3	33	16.5
4 and above	31	15.5
Age of Youngest Child		
Below 1 year	52	26.0
1–2 years	117	58.5
3–4 years	19	9.5
5 years and above	12	6.0
Work Experience		
Below 2 years	46	23.0
2–5 years	75	37.5
6–10 years	57	28.5
Above 10 years	22	11.0
Employment Type		
Full-time	105	52.5
Part-time	95	47.5

Source: Field survey, 2025.

From the data presented in Table 3 above, it is evident that most of the subjects lie within the active working age bracket. The most significant proportion of the respondents comprises those aged between 35 and 44, accounting for 33.0%, while the second-largest proportion consists of those aged between 25 and 34, accounting for 32.5%. On the other hand, the smallest proportion of respondents lies within the category of those below 25 years of age, accounting for 19.0%, while those aged more than 45 account for 15.5%. With regards to the marital status of the respondents, the highest proportion (32.0%) of the female respondents is married, followed by singles (28.0%). The proportion of the respondents who are widows stands at 21.5%, while the divorced category forms 18.5% of all the survey respondents.

The majority of the respondents (36.0%) have attained diploma levels of education, followed by those with first degrees (29.5%). The percentage of respondents who have attained postgraduate education is 26.0%, while the percentage of women with only secondary educational qualifications is 8.5%. In terms of the number of children raised by these women or the number currently being raised by these women, the greatest proportion is represented by the number of women who have two children (35.0%), followed by those who have one child (33.0%). Women with three children represent 16.5% of all respondents, while 15.5% of women have four or more children. In addition, the largest percentage of women with children aged 1 to 2 years represents 58.5% of all women surveyed, while 26.0% of women have children younger than one year old. It can be seen that these women are lactating mothers with infants.

In terms of the work experience of the women in this survey, the percentage of women with 2–5 years of work experience is 37.5%. With respect to women having 6 to 10 years of work experience, the percentage in relation to the total sample size is 28.5%. On the other hand, with respect to women having less than two years of work experience, the percentage is 23.0%. Similarly, with respect to women having over ten years of work experience, the percentage is 11.0%. As for the employment status of these women, 52.5% work on a full-time basis, while 47.5% work on a part-time basis. Consequently, it can be seen that more of the women surveyed are working full-time compared to those working part-time.

Table 4. Model fit summary.

Fit Indices	Model	Default Model	Saturated Model	Independence Model
RMR, GFI	RMR	0.074	0.000	0.562
	GFI	0.908	1.000	0.307
	AGFI	0.873		0.208
	PGFI	0.658		0.269
Baseline Comparisons	NFI (Delta1)	0.949	1.000	0.000
	RFI (rho1)	0.938		0.000
	IFI (Delta2)	0.976	1.000	0.000
	TLI (rho2)	0.971		0.000
	CFI	0.976	1.000	0.000
RMSEA	RMSEA	0.065		0.380
	LO 90	0.049		0.369
	HI 90	0.080		0.392
	PCLOSE	0.065		0.000

The results of the Model Fit Summary for work schedule flexibility, role fluidity, and quality of work are shown in Table 4. The RMR value of 0.074 is low, which means that the observed and predicted scores have little discrepancy. The GFI value of 0.908 is greater than the acceptable GFI value of 0.90, indicating that the goodness of fit is high. Similarly, AGFI of 0.873 is acceptable since it is only slightly less than the minimum acceptable value of 0.90. All baseline comparison indices show that the model fit is acceptable. The NFI value of 0.949, IFI value of 0.976, TLI value of 0.971, and CFI value of 0.976 are all greater than 0.90, which is the recommended value. This shows that the model is very adequate in explaining the variables. Since the RMSEA error of approximation is 0.065, which is lower than the cut-off point of 0.08, it can be inferred that the model fits well. This inference is reinforced by the range of the confidence interval for RMSEA, which extends from 0.049 to 0.080. Also, the PCLOSE value is 0.065, meaning the model fit is good.

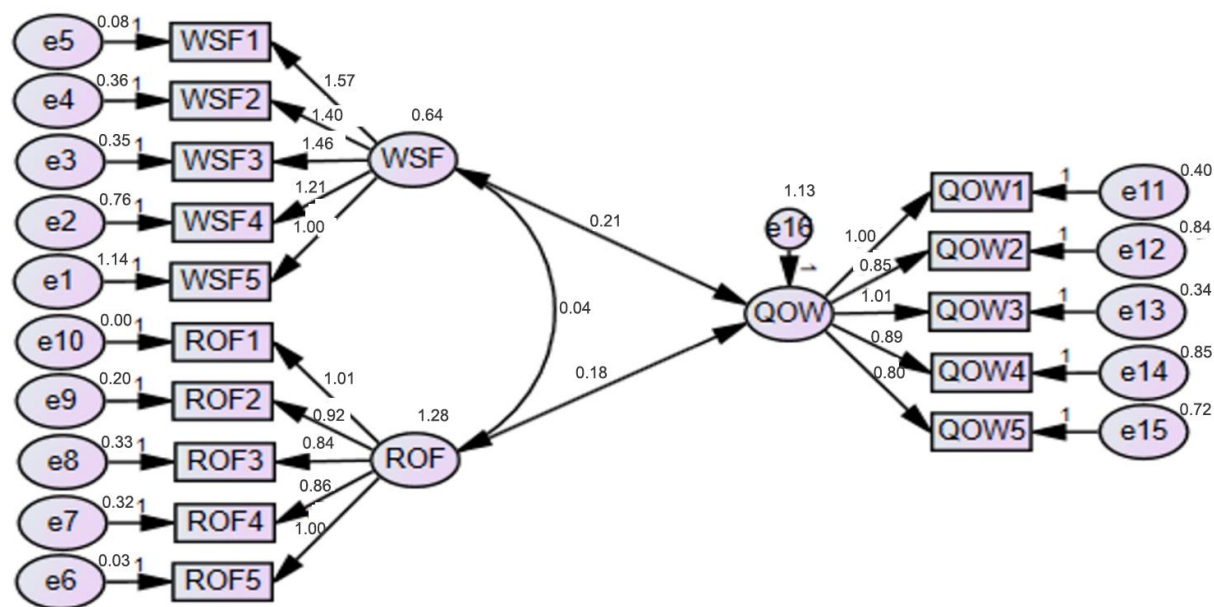


Figure 1. Structural equation model for work schedule flexibility and role fluidity.

Figure 1 illustrates that path analyses, navigating how WSF and ROF affect QOW. The path analyses are complemented by Table 5.

Table 5. Covariances test for work schedule flexibility and role fluidity.

Cov.			Estimate	S.E.	C.R.	P-value
WSF	<-->	ROF	0.035	0.065	0.540	0.589

Table 5 presents the covariance analysis between work schedule flexibility and role fluidity. The relationship between work schedule flexibility and role fluidity (Estimate = 0.035, C.R. = 0.540, p-value = 0.589) is positive but statistically insignificant. This indicates that the two variables do not exhibit any strong covariance. From the results, one can infer that variations in work schedule flexibility do not have much effect on role fluidity for the nursing mothers within the sampled manufacturing companies. Even though there exists a positive relationship, the high p-value of greater than the threshold value of .05 indicates that the relationship is insignificant.

Table 6. Regression Weights on work schedule flexibility, role fluidity, and quality of work.

Path			Estimate	S.E.	C.R.	P-value
QOW	<---	WSF	0.212	0.104	2.049	0.040
QOW	<---	ROF	0.176	0.071	2.483	0.013

Results from the regression analysis regarding flexibility of work schedules, fluidity of roles, and quality of work have been provided in Table 6. From the regression coefficient, we learn that a change of one unit in the level of flexibility of work schedules ($\beta = 0.212$) will result in a change of 0.212 in the quality of work. This level of precision has a standard error (S.E.) of 0.104. Moreover, a critical ratio (C.R.) that exceeds ± 1.96 (C.R. = 2.049) and a p-value of less than 0.05. Therefore, the flexibility of the work schedule has a positive and significant effect on the quality of work. An increase in fluidity of roles ($\beta = 0.176$) increases quality of work by 0.176 units; that is, a mean change in fluidity of roles will result in the same mean change in quality of work. The level of accuracy is determined using Standard Error (S.E.), which equals 0.071. Critical Ratio (C.R. = 2.483) is greater than ± 1.96 , and probability (p-value = 0.013) is smaller than 0.05. Null hypotheses are rejected in both flexibility of work schedule and fluidity of roles, because values of their respective probabilities are below 0.05. Hence, work schedule flexibility and role fluidity have significant positive effects on the quality of work of nursing mothers in manufacturing firms.

Table 7. Model fit summary on managerial support, co-worker support, and efficiency.

Fit Indices	Model	Default
RMR, GFI	RMR	0.106
	GFI	0.923
	AGFI	0.894
	PGFI	0.669
Baseline Comparisons	NFI	0.898
	RFI	0.877
	IFI	0.962
	TLI	0.953
	CFI	0.961
RMSEA	RMSEA	0.052
	LO 90	0.034
	HI 90	0.069
	PCLOSE	0.396

Model fit is presented in Table 7, considering managerial support, colleague support, and efficiency. There are many fit indices that are taken into consideration when evaluating model fit. Although the value of RMR (.106) is slightly higher compared to the ideal value, it is still a reflection of an adequate relationship between the observed and predicted values of the model. Since GFI is higher than the critical value, which is $0.923 > 0.90$, then the fit is acceptable in relation to the data set being considered. It should be noted that the AGFI value is also acceptable since

it is near the critical value, 0.894. Since the RMSEA value is 0.052, which is less than the cut-off point of 0.08, the fit is acceptable. The confidence interval (CI) of RMSEA (0.034–0.069) also indicates the same result, as the values stay within the acceptable limit. Moreover, the PCLOSE value (0.396) indicates that the null hypothesis that the model fit is good cannot be rejected.

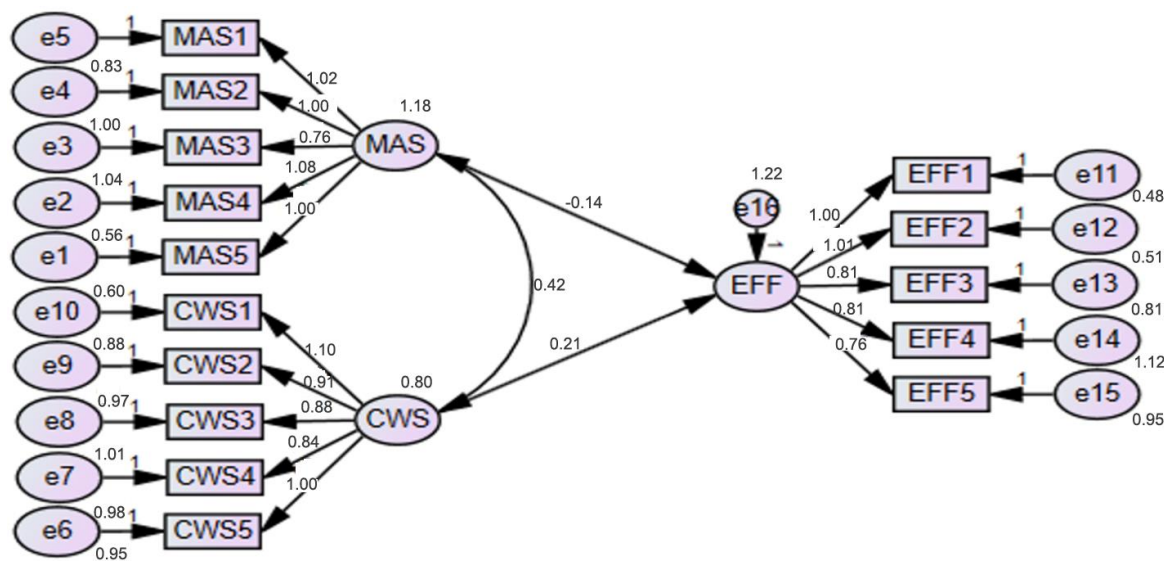


Figure 2. Structural equation model for managerial support and co-worker support.

Figure 2 illustrates the path analyses, showing how MAS and CWS affect EFF. The path analyses are complemented by Table 8.

Table 8. Covariances test for managerial support and co-worker support.

Cov.			Estimate	S.E.	C.R.	P-value
MAS	<-->	CWS	0.420	0.096	4.367	0.000

Table 8 provides the covariance analysis between the managerial support and co-worker support. There is a significant positive relationship between the managerial support and co-worker support (Estimate = 0.420, C.R. = 4.367, p-value < 0.001). It means that there is a very strong positive relationship between managerial support and co-worker support in the working environment. The positive estimate value implies that if there is an increase in the managerial support, then the co-worker support will also rise. The Critical Ratio (C.R. = 4.367) is greater than ±1.96, showing that the relationship is statistically significant. Similarly, the p-value is also below 0.05.

Table 9. Regression weights on managerial support, co-worker support and efficiency.

Path			Estimate	S.E.	C.R.	P-value
EFF	<---	MAS	-0.140	0.095	-1.477	0.140
EFF	<---	CWS	0.209	0.122	1.707	0.088

Results obtained from Table 9 are those from the regression analysis done on the impact of Managerial Support and Co-worker Support on efficiency. The regression coefficient ($\beta = -0.140$) shows that a 14% unit increase in managerial support will lead to a reduction of 14 units in efficiency. The standard error of the regression coefficient is the indicator of accuracy, while in this case, it is 0.095. Furthermore, the critical ratio (C.R. = -1.477) is less than ±1.96, meaning that it does not have any statistical significance. In co-worker support ($\beta = 0.209$), the regression coefficient reflects that there will be an increase of 0.209 in efficiency if there is an increase in co-worker support by one unit. The relationship between co-worker support and efficiency can be said to be directly proportional. This is because, with the S.E. of 0.122, which is quite small, the estimate becomes precise. The C.R., which is 1.707, is lower than ±1.96, and the probability p-value of 0.088 is higher than 0.05. The result is insignificant. Given that the p-values for managerial support and co-worker support are higher than 0.05, the H_0 hypothesis will not be rejected.

5. Discussion

Findings reveal that flexible work schedules have a positive and significant effect on the quality of work of nursing mothers. The implementation of flexible work schedules for nursing mothers led to an improvement in the quality of work that they exhibited in their manufacturing firms. Flexible work schedules for nursing mothers allowed them to have a better balance between the demands of their work and their family responsibilities. Having flexible work schedules for nursing mothers has led to a reduction in the amount of stress and pressure that they experience at work, hence enabling them to focus on their work and improve the quality of their work. These findings are in line with previous studies on flexible work schedules for employees. Ray and Pana-Cryan (2021) also demonstrated that implementing flexible work schedules for employees results in an improvement in their work-related outcomes and well-being at work. In relation to nursing mothers, the research carried out by Watson et al. (2026) examines the problem of nursing mothers having to manage both their position as nursing mothers and as employees in their places of work, thereby ensuring that they adjust fluidly to these two positions for them to maintain themselves as employees within their organization. Moreover, Zhou et al. (2024) noted that nurses who had gone back to work after giving birth had to go through a transition phase relating to their positions as nurses within the workplace environment. Consequently, assisting nursing mothers in adjusting fluidly to their role within and outside of the workplace ensures that they continue performing well at their work.

Findings also demonstrate that role fluidity has a positive and significant effect on the quality of work of nursing mothers. Nursing mothers who had the flexibility to adjust to and manage their various roles at work and at home exhibited an improvement in their quality of work. Role fluidity for nursing mothers helped them to adapt to their changing roles at work and at home without having too many conflicts between the two aspects of their lives. Role fluidity for nursing mothers was found to have a positive impact on the quality of work that they exhibit in their manufacturing firms. This finding corroborates the findings of previous studies on role fluidity. For instance, Major and Napier (2019) demonstrated that role fluidity for workers helps them to adjust to changes in the responsibilities that they have within their jobs. Concerning nursing mothers is the study done by Watson et al. (2026) on the issue of nursing mothers having to juggle the roles of being nursing mothers and employees at the place of work indicates the necessity of fluidity in nursing mothers regarding these two roles to keep them as employees within the organization. Furthermore, Zhou et al. (2024) discovered that nurses who have had children must undergo an adjustment period in regard to their roles as nurses within the organization. Thus, assisting nursing mothers in adjusting fluidly to their roles within and outside of the workplace will enable them to maintain the quality of their work.

Findings also show that managerial support has a negative but non-significant effect on the efficiency of nursing mothers. Nursing mothers who received support from their managers did not exhibit an improvement in their efficiency levels within the manufacturing firms that employed these nursing mothers. While it is generally recognized that managerial support enhances the efficiency of employees, the support provided to nursing mothers did not have a significant positive impact on their efficiency levels. This finding is different from some previous studies that have demonstrated the impact of managerial support upon nursing mothers' efficiency. For example, Trifunović (2024) demonstrated that providing managerial support to employees enhances their performance and the autonomy of employees in their workplaces. Another study by Lisbona et al. (2020) also found that providing managerial support to working mothers enhances their feelings of trust within the organization and their commitment to the organization. However, the findings of the study presented in this paper counter these findings in that managerial support does not have an impact on the efficiency of nursing mothers in their manufacturing firms.

Finally, findings demonstrate that co-worker support has a positive but non-significant effect on the efficiency of nursing mothers. While the support of co-workers encourages nursing mothers to continue performing their work well, it does not have a significant effect on their efficiency. While managerial and co-worker support is generally beneficial for nursing mothers, the support from co-workers did not have a significant positive impact on the efficiency of nursing mothers in their manufacturing firms. Previous studies support these findings. For instance, Sodeify and Habibpour (2021) found that the support of co-workers at the workplace creates a positive environment for nurses. Furthermore, the work of both Jeong and Lee (2020) and Sen and Yıldırım (2023) also found that the support of co-workers enhances the work-life balance of nurses and the psychological well-being and job performance of nurses, respectively. However, in manufacturing firms, this support from co-workers is not strong enough to significantly improve the efficiency of nursing mothers.

6. Conclusion

A flexible work environment is important to improving the task performance of nursing mothers in manufacturing firms. The flexibility of nursing mothers' work schedules has a positive and significant effect on the quality of the work done by these nursing mothers. Nursing mothers who have a flexible schedule can perform their duties efficiently while taking care of their families. There is also a positive and significant effect of role fluidity on the quality of work done by nursing mothers. Nursing mothers who have the flexibility to perform the duties of both nursing mothers and employees perform better than those who have to perform the roles of nursing mothers only. However, managerial and co-worker support did not have a significant effect on the efficiency of nursing mothers, though co-worker support had a positive effect on the efficiency of nursing mothers. Support from managers and coworkers alone will not significantly improve the efficiency of nursing mothers unless there are flexible work policies introduced in these firms. However, this study concludes that flexible work environments will significantly help nursing mothers to perform their work better and balance their work and family responsibilities.

7. Recommendations

The study recommends the following:

- i. Management should introduce flexible work schedules for nursing mothers to allow them to fulfill their family duties. This could allow them to have more quality work for their firms and experience fewer stresses at work.
- ii. While flexibility in the work roles of nursing mothers may be helpful, managers should not give nursing mothers too many tasks and responsibilities, as it could hinder the quality of their work.
- iii. Managers and supervisors should find better ways to support nursing mothers within the manufacturing firms. They can show emotional support to nursing mothers and create friendly policies within the workplace. This can encourage nursing mothers to produce more quality work at their jobs.
- iv. Other co-workers should also find ways to support nursing mothers within the firms. Nursing mothers would feel more comfortable in their workplaces and be committed to higher-quality work through better team relationships.

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